

CLIPPEDIMAGE= JP361193745A

PAT-NO: JP361193745A

DOCUMENT-IDENTIFIER: JP 61193745 A

TITLE: PRODUCTION OF DIFFERENT PHASE COMPOSITE METALLIC BODY

PUBN-DATE: August 28, 1986

INVENTOR-INFORMATION:

NAME

UEJIMA, YOSHIYUKI

KASAMA, AKIO

MIZOGUCHI, SHOZO

KONNO, MASA HARU

ASSIGNEE-INFORMATION:

NAME

NIPPON STEEL CORP

COUNTRY

N/A

APPL-NO: JP60032784

APPL-DATE: February 22, 1985

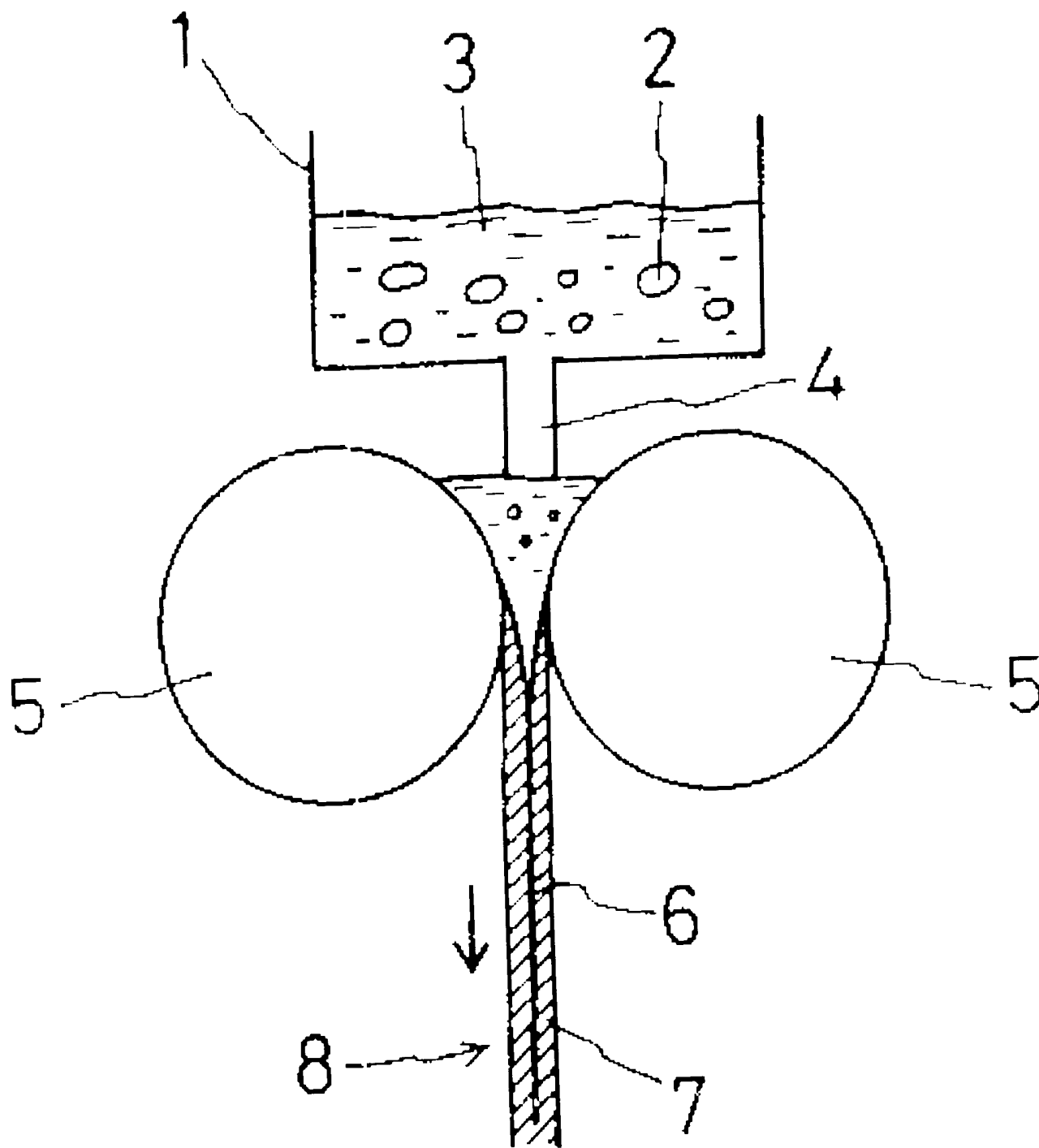
INT-CL (IPC): B22D011/06;B22D019/16

US-CL-CURRENT: 164/480,164/900

ABSTRACT:

PURPOSE: To obtain a different phase composite metallic body having the compsn. different in the surface part and central part by supplying a molten metal maintained in a solid-liquid co-existing state to rolls or belts, etc. under rotation and solidifying quickly the molten metal at a cooling rate of a specific value or above.

CONSTITUTION: The molten steel is contained in a vessel 1 and the state where solid 2 and liquid 3 co-exist is created. The molten metal is then supplied between cooled with rolls 5, 5 under high-speed rotation from a nozzle 4. The molten steel in the solid-liquid co-existing state is quickly solidified at a cooling rate of $\geq 10^{\circ}\text{C/sec}$ to obtain the flat plate-shaped different phase composite metallic body 8 consisting of the central part 6 and the surface layer part 7. The production of the different phase composite metallic body having the excellent wear resistance of the surface by the easy method is



thus made possible.

COPYRIGHT: (C)1986,JPO&Japio